

REMARKS

Claims 1-6 and 16-28 are now pending in this application. Claims 16-18 are withdrawn. Claims 1-6 are rejected. Claim 5 is objected to. Claims 7-15 are previously cancelled. New claims 19-28 are added. Claims 1-6 and 16-18 are amended herein to place them in better form.

Claim 5 has been objected to. The Office Action has requested that a comma be removed. Such comma was removed in the Amendment filed on March 28, 2007.

Claims 1 and 6 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

The Office Action states that it is not clear from the specification what the tribochemical activation is. Tribochemistry is an area of mechanochemistry, which deals with physical-chemical changes of solids affected by friction and impingement. In the present invention, the special physical-chemical attributes are activated mixed crystals, which possess a heightened capability for modified granulation, for instance, at the addition of water. One of ordinary skill in the art would understand what the tribochemical activation is. Tribochemistry and tribochemical activation are standard terms and if the Examiner has additional questions, Applicants respectfully request that the Examiner contact Applicants' attorney by telephone.

The Office Action states that it is not clear how the disintegration takes place under a protective gas. The Office Action also asks what is a protective gas. The Office Action states that it appears that the specification teaches the use of the

protective gas when an organic material is disintegrated and not in the case of an inorganic material. A protective gas is a gas or gas mixture which replaces air in the atmosphere in a certain area, and primarily is utilized to replace oxygen in air in a certain area. Protective gases can be, for example, carbon dioxide and nitrogen. In fact, the specification on page 4 states that protective gases are employed instead of air. Thus, the disintegration takes place in an atmosphere including a protective gas. One of ordinary skill in the art would know the term protective gas. Also, the protective gas is used with the comminution of inorganic as well as organic materials and the specification does not disclose otherwise. Furthermore, the subject matter of claim 6 is found in original claim 6 as filed.

Accordingly, for the above-mentioned reasons, Applicants respectfully request that the enablement rejection of claims 1-6 be withdrawn. Applicants also wish to note that the courts have stated that "[a]s a matter of Patent Office practice, then, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of § 112 *unless* there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support." *See In re Marzocchi and Horton*, 169 USPQ 367, (CCPA 1971). No evidence has been provided by the Office Action that the truth of any assertion in the specification of the above-identified application is

incorrect and therefore Applicants respectfully request that the enablement rejection be withdrawn.

Claims 1-6 have been rejected under 35 U.S.C. § 112, second paragraph, as indefinite. The Office Action states that no process steps are provided for the method and that therefore the Examiner treated claim 1 as an apparatus claim. Applicants respectfully disagree with the treatment of a process claim as an apparatus claim. Claim 1 has been amended to place it in better form and Applicants respectfully request that claim 1 be examined as a process claim.

The Office Action states that claim 1 is indefinite because it is not clear what the phrase "tribochemical activation" is intended to encompass. As stated above, one of ordinary skill in the art would know what is meant by tribochemical activation.

The Office Action has also identified the terms "in particular" and "(disintegrated)" in claim 1 and "the crystal lattice" in claim 3, and "said particles" in claim 5 as indefinite. Appropriate correction has been made.

The Office Action states that claim 6 is indefinite because it is not clear what is meant by the phrase "protective gas." As explained above, such a term would be known to one of ordinary skill in the art.

Claims 1 and 4-5 have been rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 3,062,457 (Willems).

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art

reference." *See Verdegaal Brothers Inc. v. Union Oil Company of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Claim 1 recites moving objects transonically. Such disclosure (or suggestion thereof) is absent in Willems. The transonic speed of an object is the speed at which, for example, the air flowing around the object has a relative speed that is, in part, supersonic. Willems is directed to different subject matter. The reference in Willems to supersonic is not a reference to speed, rather, it is a reference to frequency. Sound waves at a frequency that is audible by humans is known as audio frequency and frequencies above that are known as supersonic frequencies. Willems discloses in column 1, lines 49-52 that "[t]he oscillatory pressure is exerted on the particles contained in the treating chambers at frequencies in the audio-frequency range and in the supersonic frequency range." Thus, this makes clear that the reference to supersonic is a reference to frequency, not speed. As for the blades themselves, Willems discloses in column 2, lines 41-44 that "[e]ach blade thus has the shape and the oscillating properties of a tine of a tuning fork, and its free end is adapted to oscillate preferentially in an approximately tangential path." Thus, the disclosure of the blades is about their vibration, not about their moving at a transonic speed. Additionally, claim 1 recites that the pulse of the impact pressure fronts is less than 10 μ s. In Willems there is no disclosure or suggestion of impact pressure fronts having a pulse duration of less than 10 μ s.

Accordingly, for the above-mentioned reasons claim 1 is patentable over Willems and notice to that effect is respectfully requested. Claims 4 and 5 are patentable at least for the reason that they depend from a patentable base claim. *See In re Royka and Martin*, 180 USPQ 580, 583 (CCPA 1974).

Claim 4 is further patentable at least because Willems fails to disclose aerodynamically shaped objects which are rotating. There is no disclosure of aerodynamically shaped objects and there is no disclosure of the rotation of objects.

Claim 5 is further patentable at least because there is no disclosure of the objects rotating in Willems.

Claims 2-3 and 6 have been rejected under 35 U.S.C. § 103(a) as obvious under U.S. Patent No. 3,062,457 (Willems).

Claims 2-3 and 6 are patentable at least for the reason that they depend from a patentable base claim. *See In re Fine*, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988).

Claim 6 is further patentable because a protective gas is not disclosed or suggested in Willems.

Claims 1-6 and 16-18 have been amended. New claims 19-28 have been added. Support for the claim amendments and for the new claims can be found in, for example, the claims as filed, the specification on page 3, paragraph 8, and in Figures 3 and 5.

No fee is believed due. If there is any fee due the USPTO is hereby authorized to charge such fee to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,

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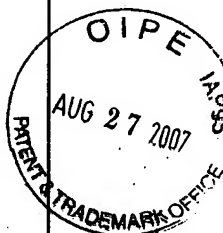
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Amendment 05/29/07



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